

AMENDMENTS TO THE CLAIMS

Please amend Claims 5 and 8-13 as follows.

1. (Original) Semiconductor ultrafine particles, which maintain 50% or more fluorescence quantum yield of photoluminescence when the particles are kept dispersed in water at 10°C to 20°C in air for five days.

2. (Original) Semiconductor ultrafine particles according to Claim 1, wherein the particles belong to Group II-VI semiconductor ultrafine particles.

3. (Original) Semiconductor ultrafine particles according to Claim 2, wherein the fluorescence quantum yield is measured when they are kept dispersed in an aqueous solution having a pH of 10 to 12 comprising a water-soluble compound containing a Group II element (about 0.001 to about 0.05 mol/L) as a starting material of the semiconductor ultrafine particles of Group II-VI and a surfactant (about 1 to 1.5 mol per mol of the Group II element contained in the aqueous solution).

4. (Original) Semiconductor ultrafine particles according to Claim 2, wherein the particles are cadmium telluride.

5. (Currently amended) A fluorescent material which is obtained by dispersing semiconductor ultrafine particles according to ~~any one of Claims 1 to 4~~ in a glass matrix formed by a sol-gel process.

6. (Original) A fluorescent material wherein semiconductor ultrafine particles with 20% or more fluorescence quantum yield of photoluminescence are dispersed in a glass matrix formed by a sol-gel process.

7. (Original) A fluorescent material according to Claim 6, wherein a concentration of semiconductor ultrafine particles in the glass matrix is 2×10^{-6} to 2×10^{-4} mol/L.

8. (Currently amended) A fluorescent material according to ~~any one of Claims 5 to 7~~, wherein the glass matrix is formed by a sol-gel process using an organoalkoxysilane as a starting material.

9. (Currently amended) A fluorescent material according to ~~any one of Claims 5 to 8~~, wherein semiconductor ultrafine particles are dispersed in the glass matrix, the particles having a

fluorescence quantum yield of photoluminescence which is decreased by 20% or less when the fluorescent material is left at room temperature in air for eight months.

10. (Currently amended) A method for manufacturing semiconductor ultrafine particles according to ~~any one of~~ Claims 2, ~~to~~ 4; the method comprising introducing a compound containing a Group VI element under an inert atmosphere into an aqueous alkaline solution in which a water-soluble compound containing a Group II element and a surfactant are dissolved;

wherein the amount of surfactant is about 1 to about 1.5 mol per 1 mol of the Group II element; and

ultrapure water in which the specific resistance is 18 MΩ•cm or more and the total amount of organic compound (TOC) contained therein is 5 ppb or less is used as a solvent.

11. (Currently amended) A method of manufacturing a fluorescent material according to ~~any one of~~ Claims 5 ~~to~~ 9, the method comprising adding a dispersion of semiconductor ultrafine particles according to ~~any one of~~ Claims 1 ~~to~~ 4 to a sol solution containing a metal alkoxide, to cause hydrolysis and condensation polymerization, thereby forming a glass matrix.

12. (Currently amended) A method of manufacturing a fluorescent material according to Claim 11, the method comprising adding a dispersion of semiconductor ultrafine particles according to ~~any one of~~ Claims 1 ~~to~~ 4 to a sol solution containing a metal alkoxide, to cause hydrolysis and condensation polymerization, thereby forming a glass matrix;

wherein the dispersion of the semiconductor ultrafine particles is added when the viscosity of the sol solution containing a metal alkoxide reaches 300 centipoises to 3000 centipoises.

13. (Currently amended) A light emitting device comprising:

a light emitter composed of a fluorescent material according to ~~any one of~~ Claims 5 ~~to~~ 9;
and

a light source which emits excitation light with a wavelength of 320 nm to 600 nm for exciting the fluorescent material.